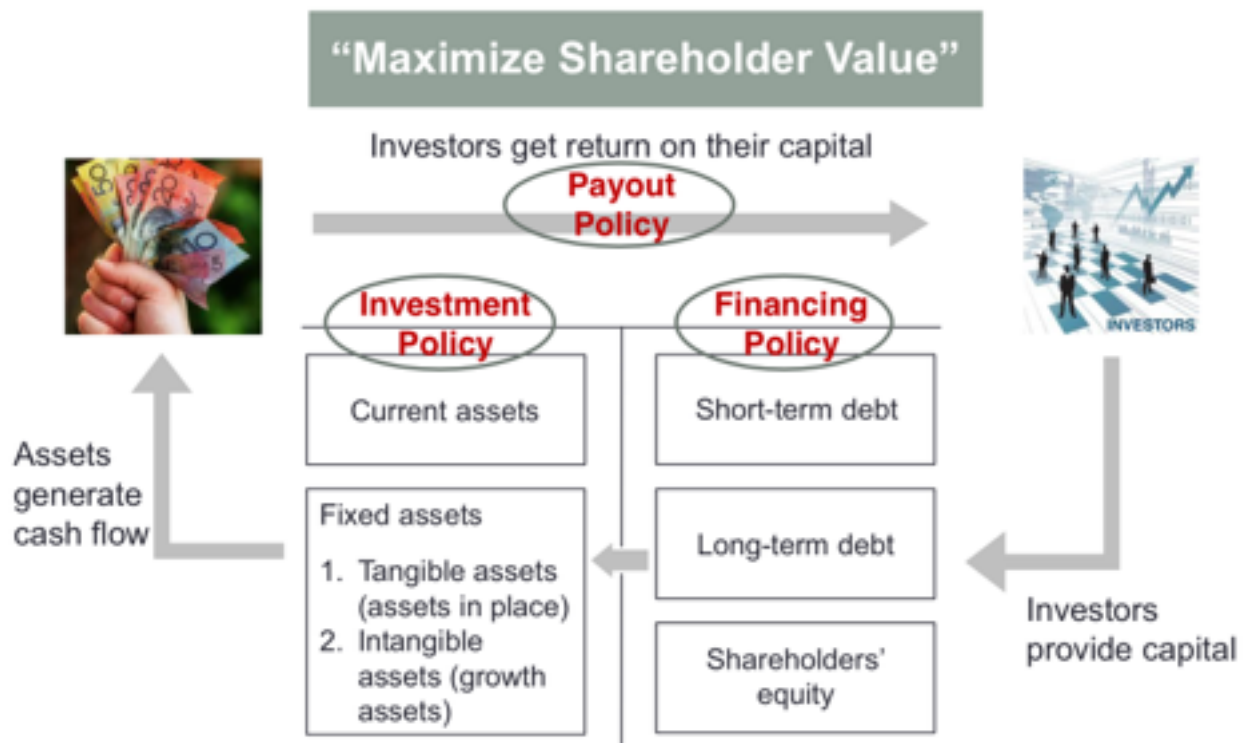


# FNCE30002: Corporate Finance Notes

## Lecture 1:



- Objective of Corporate Finance:
  - Maximise the long term value of the firm
  - Maximise shareholder wealth (or stock price if firms are public and markets are rational and reasonably efficient)
- Three key decisions:
  - Investment (spend)
  - Financing policy (raise)
  - Payout policy (return)
- Sources of funds (Financing policy)
  - Internal funds (retained earnings, cash)
  - Debt (borrowing)
  - Equity (issuing new shares)
  - Hybrids

<b>Debt</b>	<b>Hybrid Securities:</b>	<b>Equity</b>
- Bank Debt	Convertible Debt	Owner's Equity
- Commercial Paper	Preferred Stock	Venture Capital
- Corporate Bonds	Option-linked Bonds	Common Stock, Warrants
Fixed Claim		Residual Claim
Tax Deductible		Not Tax Deductible
High Priority in Financial Trouble		Lowest Priority Financial Trouble
No Management Control		Infinite
		Management Control
<b>Paid First</b>		<b>Paid only from remaining cash flow (Higher expected RoR)</b>

- Pecking order perspective
  - Public firms tend to finance their projects first with retained earnings, then with debt and then equity (last resort)
  - Reason —> Information Asymmetry
    - Managers have more information about the firm than outsiders
    - Manager prefer to issue equity when equity is overvalued
    - Equity issues signal to investors that equity is overvalued
    - Stock price declines at equity issue announcement
    - Managers avoid issuing equity

## Raising Equity Capital

Unlisted Firms	Listed Frims
<ul style="list-style-type: none"> <li>- Private Equity Financing               <ul style="list-style-type: none"> <li>—&gt; Angel Finance</li> <li>—&gt; Venture capital</li> </ul> </li> <li>- Initial Public Offering (IPO)               <ul style="list-style-type: none"> <li>—&gt; Listing shares first time</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Private placement               <ul style="list-style-type: none"> <li>—&gt; Small group of investors</li> </ul> </li> <li>- Rights issue               <ul style="list-style-type: none"> <li>—&gt; Existing shareholders</li> </ul> </li> <li>- Dividend reinvestment plan               <ul style="list-style-type: none"> <li>—&gt; To existing shareholders (offered to reinvest dived to apply for new shares)</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>- Private Equity (issuing shares not publicly traded)           <ul style="list-style-type: none"> <li>• 'Angel' Finance               <ul style="list-style-type: none"> <li>- Informal market for direct equity finance provided by a small number of high net worth individuals</li> </ul> </li> </ul> </li> </ul>	

### Finance Lease Value - **Example**

- Davids Ltd need to use a machine for its project that costs \$78,000 and has an expected life of 4 years and a residual (or salvage) value of \$20,600
- Leased for four years with annual payments of \$21,300 payable in advance
- Company tax rate - 34%
- Straight-line depreciation (full depreciation) is used
- The cost of borrowing is 15% p.a (before tax)
- Required rate of return from leasing - 22% p.a (in order to purchase)

(1) **Identify incremental cash flows:** Lease payments (-) = -\$21,300 (from year 0)

Tax shields from lease payment (+) =  $0.34 \times \$21,300 = \$7,242$  (from year 0)

(2) **Identify cash flow from borrow to buy:** Cost of asset (+) = \$78,000 (in year 0)

Tax-shields from asset depreciation (-) (from year 1) =  $0.34 \times (\$78,000/4) = -\$6,630$

Residual asset value (-) = -\$20,600 (year 4)

Book Value of Asset = Historical Cost - Accumulated depreciation

Gain/Loss on sale = (Residual Value - Book Value)

Tax on Gain or Loss = Tax Gain (loss)  $\times t_c = (\$20,600 - 0) \times 0.34 = +\$7,004$

**Incremental Cash Flow for each period = (1) - (2)**

Description	July 2010	July 2011	July 2012	July 2013	July 2014
Cost	+\$78,000				
Lease Payment	-21,300	-21,300	-21,300	-21,300	
Tax Shield	+7,242	+7,242	+7,242	+7,242	
Depreciation Tax Shield		-6,630	-6,630	-6,630	-6,630
Residual					-20,600
Tax on Gain/Loss					+7,004
Total	63,942	-20,688	-20,688	-20,688	-20,226

(2) After-tax cost of borrowing =  $15\% \times (1 - 0.34) = 9.9\%$  (discount rate captures tax-shields on interest payments when borrowing money, the net cost of borrowing)

(3) NPV incremental cash flows:

So, Davids Ltd should reject the lease and borrow money to buy the machine

$$\begin{aligned}
 NPV &= 63,942 - \frac{20,688}{(1.099)} - \frac{20,688}{(1.099)^2} - \frac{20,688}{(1.099)^3} - \frac{20,226}{(1.099)^4} \\
 &= 63,942 - 65,403.68 \\
 &= -\$1,461.68
 \end{aligned}$$